



AMENDMENT TO THE CLAIMS

Please cancel claims 1-33 without prejudice.

Please retain claim 34, which is now allowed.

Please add the following new claims 35-40 as follows:

1-33 Cancelled.

34 (Previously Presented) A fluorescence electronic endoscopic system for viewing matter comprising, in combination:

- I) at least one excitation light emitting system structured and arranged to illuminate the subject matter with excitation light;
- II) at least one non-excitation light emitting system structured and arranged to illuminate the subject matter with non-excitation light;
- III) at least one alternating system structured and arranged to alternate use of said at least one excitation light emitting system and said at least one non-excitation light emitting system,

- ① wherein said at least one alternating system is structured and arranged to illuminate the subject matter for first periods of time essentially only said at least one excitation light emitting system, and

- ② wherein said at least one alternating system is structured and arranged to illuminate the subject matter for second periods of time by said at least one non-excitation light emitting system;

- IV) at least image sensing system, structured and arranged to sense images of the subject matter, comprising,

- ① at least one color CCD inside an endoscope,

- ② at least three video channels, wherein:

- 1. at least one of said video channels, which is sensitive to the fluorescence emitted from the subject matter but not to the excitation light, is structured and arranged to differentiate without using any filters or dichroic mirrors between the excitation light and the fluorescence, and transmit only the fluorescence image during such first period of time, and
 - 2. at least two of said video channels are structured and arranged each to transmit at least one such image sensed

during such second period of time

- V) at least one superimposing system structured and arranged to superimpose such images sensed by said image sensing system,
 - ① wherein at least one such image sensed during such first period of time is superimposed with at least one such image sensed during such second period of time to create at least one such superimposed image; and
- VI) at least one image viewing system structured and arranged to permit viewing such at least one superimposed image.

35 (New) A fluorescence electronic endoscopic system for viewing matter comprising, in combination:

- I) at least one light source for illuminating the subject matter, said at least one light source emitting light having plurality of wavelength ranges, said light comprising visible light and an excitation light;
- II) at least one filter unit, arranged between said at least one light source and the subject matter, that periodically filters said light from said at least one light source to illuminate the subject matter, said at least one filter unit comprising at least one blue filter, with or without at least one red filter, and with or without at least one green filter, such that the light filtered by said at least one blue filter functions as at least one excitation light that causes the subject matter to fluoresce and emit fluorescent light, while the light un-filtered and/or the light filtered by said at least one green filter and/or the light filtered by said at least one red filter function as at least one non-excitation light;
- III) at least one fluorescence filter, said at least one fluorescence filter preventing transmission of said at least one excitation light reflected from the subject matter but not of the fluorescent light emitted from the subject matter and said at least one non-excitation light reflected from the subject matter;
- IV) at least one image sensing system, structured and arranged to sense images of the subject matter passing through said at least one fluorescence filter, said at least one image sensing system comprising,
 - ① at least one black-and-white CCD provided inside an endoscope,

- ② at least two video channels, wherein:
 - 1. at least one of said video channels is structured and arranged to transmit the fluorescence image sensed during the period(s) of the excitation light(s), and
 - 2. at least one of said video channels is structured and arranged to transmit at least one such image sensed during the period(s) of the non-excitation light(s);
- V) at least one superimposing system structured and arranged to superimpose such images sensed by said image sensing system,
 - ① wherein fluorescence image sensed during the period(s) of the excitation light(s) is superimposed with at least one such image sensed during the period(s) of the non-excitation light(s) to create one such superimposed image; and
- VI) at least one image viewing system structured and arranged to permit viewing such at least one superimposed color image.

36 (New) The fluorescence electronic endoscopic system according to claim 35, wherein said at least one filter unit is a rotating disk upon which said at least one blue, at least one green and at least one red filters are mounted.

37 (New) The fluorescence electronic endoscopic system according to claim 35, wherein said at least one filter unit is a rotating disk upon which said at least one blue and at least one green filters are mounted.

38 (New) The fluorescence electronic endoscopic system according to claim 35, wherein said at least one filter unit is a rotating disk upon which said at least one blue and at least one red filters are mounted.

39 (New) The fluorescence electronic endoscopic system according to claim 35, wherein said at least one filter unit is a rotating disk upon which said at least one blue filter is mounted, and in which there is at least one pass-through hole.

40 (New) The fluorescence electronic endoscopic system according to any one of claims 34 and 35 further comprising at least one adjuster filter, said at least one adjuster filter decreasing only some of the excitation light intensity but most of the non-excitation light intensity from said at least one light source for illuminating the subject matter.